

June 9, 2017

Via Certified Mail

Mr. Andrew Park Hazardous Waste Programs Branch US Environmental Protection Agency Region 2 290 Broadway, 22<sup>nd</sup> Floor New York, New York 10007-1866

Re: Response to 5/3/2017 Comments - USEPA
AOC 10: Truck Loading Rack Remedial Investigation Workplan
Hess Corporation Former Port Reading Complex (HC-PR)
750 Cliff Road
Woodbridge, Middlesex County, New Jersey
NJDEP PI# 006148
ISRA Case No. E20130449
EPA ID No. NJD045445483

Dear Mr. Park:

Earth Systems, Inc. (Earth Systems) has prepared this letter on behalf of Hess Corporation (Hess) in response to the May 3, 2017 correspondence from the United States Environmental Protection Agency (USEPA) regarding the above referenced revised workplan. In addition to the May 3, 2017 comments, the USEPA also issued comments in August 2016 and the New Jersey Department of Environmental Protection (NJDEP) issued comments in September 2016. Hess addressed the comments from both the USEPA and NJDEP in November 2016. Subsequently, the USEPA requested a revised RIW in February 2017 (submitted in March 2017).

#### Section 3.1 Groundwater Investigation

**EPA Comment # 1**: Figure 3b - The groundwater contour does not accurately reflect the groundwater level (12.370) detected at TR-4D. The contour must be revised to reflect the

actual groundwater levels detected at the well and any other wells nearby. If necessary, additional wells need to be installed.

Figure 3c - The contour is based on the groundwater levels detected only from the two wells: TR-4DD (5.470); and PER-9DD (3.280). It is inadequate to reflect the groundwater contour for the deep zone. In order to accurately reflect the groundwater contour for the deep zone, groundwater levels from additional monitoring wells screened for the deep zone need to be obtained. The groundwater contour may have to revised to reflect the actual groundwater levels detected for all the well screened for the deep zone.

<u>Earth Systems Response</u>: The top of the casing elevation was mistakenly noted on the contour map. A revised contour map has been included with this letter with the correct groundwater elevation for TR-4D [4.8 feet below land surface (ft bls)]. Please note that this well is frequently inaccessible as it is often completely submerged due to localized flooding in the area.

Deep groundwater flow direction is currently based on water elevations collected from wells TR-4DD (5.47 ft bls), PER-9DD (3.28 ft bls), and AD-2DD (5.54 ft bls). Additional deep groundwater wells are proposed to be installed as part of vertical delineation of groundwater impacts in the truck loading rack. In the future, the new wells will also be utilized to evaluate groundwater flow direction.

## Section 4.1 Soil Investigation

**EPA Comment # 2**: If the results from the most outer or deepest soil samples as proposed show higher than the respective soil standards, additional soil samples further out or deep must be collected to complete the delineation of contaminated soils. Please confirm.

Please justify why no SVOCs need to be analyzed for soil samples.

**<u>Earth Systems Response</u>**: As specified in the RIW, "If additional delineation is necessary, supplemental soil borings will be installed as appropriate."

Based on an evaluation of the 2016 groundwater analytical results, SVOCs (excluding 1,4-Dioxane) were only detected in excess of the Groundwater Quality Standards (GWQS) in groundwater samples collected from monitoring wells TR-2R, TR-4R, TR-4D, and TR-4DD. SVOCs were not detected in excess of the GWQS in the groundwater samples collected from the remaining 16 monitoring wells.

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#### Section 4.2 Monitoring Well Installation

**EPA Comment # 3**: Please provide isopleth maps showing the extent of shallow groundwater impacts for each of the contaminants detected above the respective standards. After a review of the maps, EPA/NJDEP will assess as to whether Hess' conclusion is adequate.

Section 3.1.4 shows the elevated levels of SVOCs (particularly naphthalene and methylnaphthalene among others) detected at TR-TW-2; TR-TW-4; TR-TW-5; TR-TW-6; and TR-TW-7.

The November 2015 and November 2016 groundwater data provide no information concerning SVOCs in the areas. Therefore, groundwater samples need to be collected to confirm elevated levels of SVOCs in the areas and if elevated, further sampling must be performed to delineate the extent. Please respond.

If the results collected for the most outer and deep groundwater samples show higher than the respective standards, additional groundwater samples further out and deep must be collected to completely delineate the extent. At the conclusion of the sampling, isopleth maps delineating the extent of each of the contaminants detected above their respective standards covering the areas for the Truck Loading Rack, Detention Basin/Smith Creek and Aeration Basins must be provided to EPA/NJDEP for review and concurrence. Please confirm.

The proposed additional monitoring wells are inadequate to delineate the extent of metals since elevated metals were detected in the area of the Detention Basin/Smith Creek and the Aeration Basin. Therefore, additional wells need to be installed to delineate horizontal and vertical extent of metal contamination in the areas. Please respond.

**<u>Earth Systems Response</u>**: Isopleth maps will be prepared for shallow groundwater following implementation of the proposed groundwater investigation activities.

Temporary well points were installed in 2009. Based on the temporary well analytical results, additional monitoring wells were installed. SVOC concentrations may have been biased high in the temporary well points due to turbidity. All permitted monitoring wells have been sampled for SVOCs annually, in addition to metals and VOCs sampling. SVOC concentrations have been detected at significantly lower concentrations in the permanent monitoring wells compared to groundwater data from the temporary well points.

The groundwater data tables that were included with the report contained SVOC results for 2015 and 2016. In addition, the SVOC results were also summarized in the text of the report. The groundwater data tables that were included in the RIW have been attached to this letter as well.

If groundwater samples collected from the most outer and deep monitoring wells have results which exceed the GWQS, additional delineation will be conducted. As mentioned above, following implementation of the proposed groundwater investigation activities, updated isopleth maps will be prepared and provided to the NJDEP and EPA.

As outlined in the RIW, the GWQS for aluminum, iron, manganese, and sodium are not health based standards and are therefore based on secondary characteristics. Exceedances of beryllium, cadmium, and arsenic are likely due to background levels common to NJ or due to the presence of historic fill. Therefore, these metals are not considered contaminants of concern. Lead is the only metal which exceeded the GWQS and requires delineation. Among the truck loading rack wells, lead was detected in

excess of the GWQS of 5 parts per billion (ppb) only in groundwater samples collected from wells TR-4DD (5.2 ppb) and TR-5 (7.6 ppb). Based on the low concentrations detected in only two of the truck loading rack wells (and lead was either not detected or detected at concentrations less than the GWQS in the remaining truck loading rack wells), lead levels are considered delineated at the truck loading rack. Lead concentrations detected in wells PER-1, PER-2, AB-1, and AB-3 will be addressed as part of groundwater investigation activities conducted to address AOC 5: Aeration Basin and AOC 12: Smith Creek & Detention Basin.

Should you have any questions or require additional clarification or information, please contact me at 732-739-6444 or via e-mail at ablake@earthsys.net. If you have any questions relating to the project and schedule moving forward, you can also contact Mr. John Schenkewitz of Hess Corporation at 609-406-3969.

Sincerely,

Earth Systems, Inc.

Amy Blake

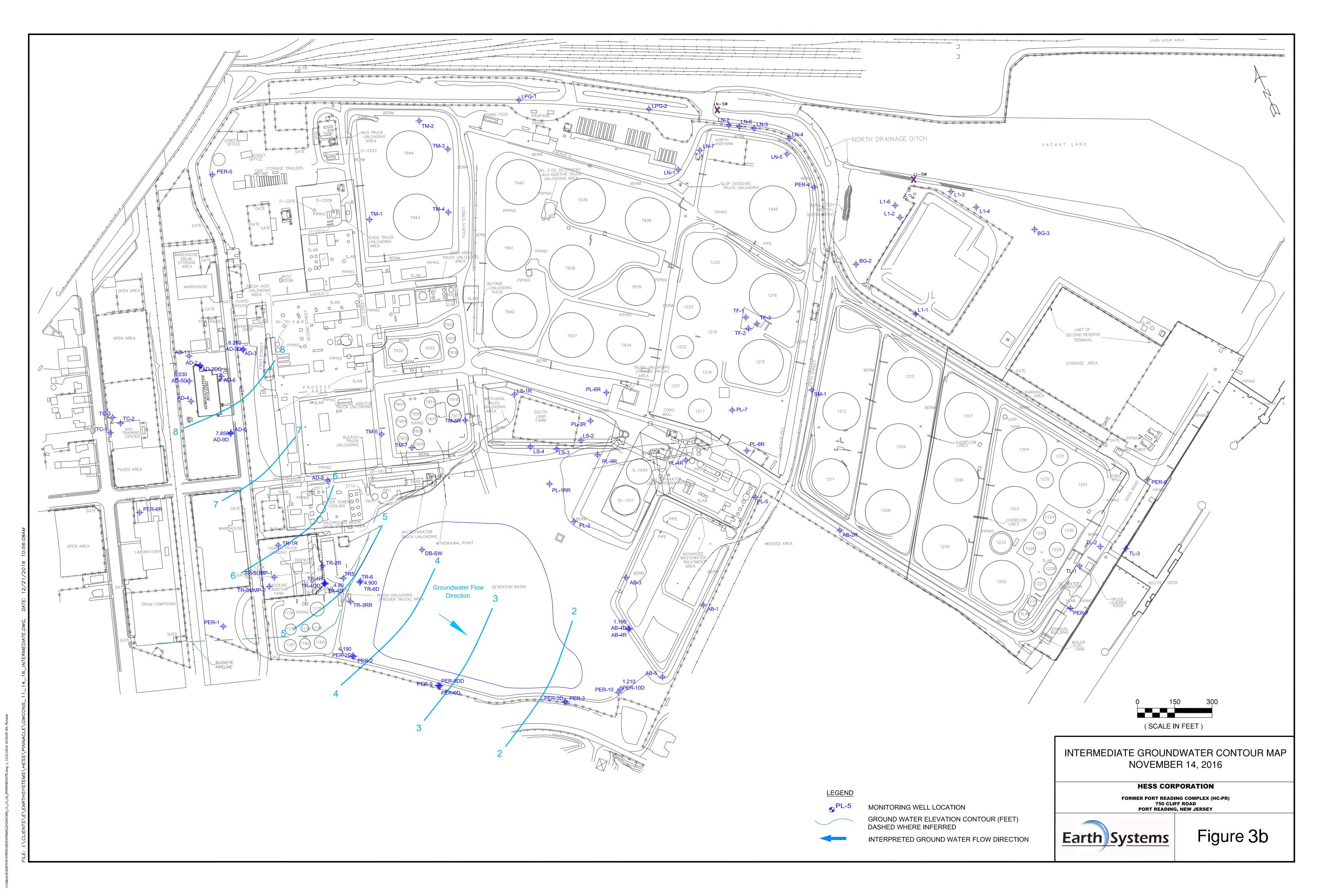
Sr. Project Manager

Mr. Phil Cole, NJDEP Case Manager (via 3 hard copies) C.

Mr. John Schenkewitz – Hess Corporation (via e-mail)

Mr. Rick Ofsanko – Earth Systems (via e-mail)

Mr. John Virgie – Earth Systems (via e-mail)



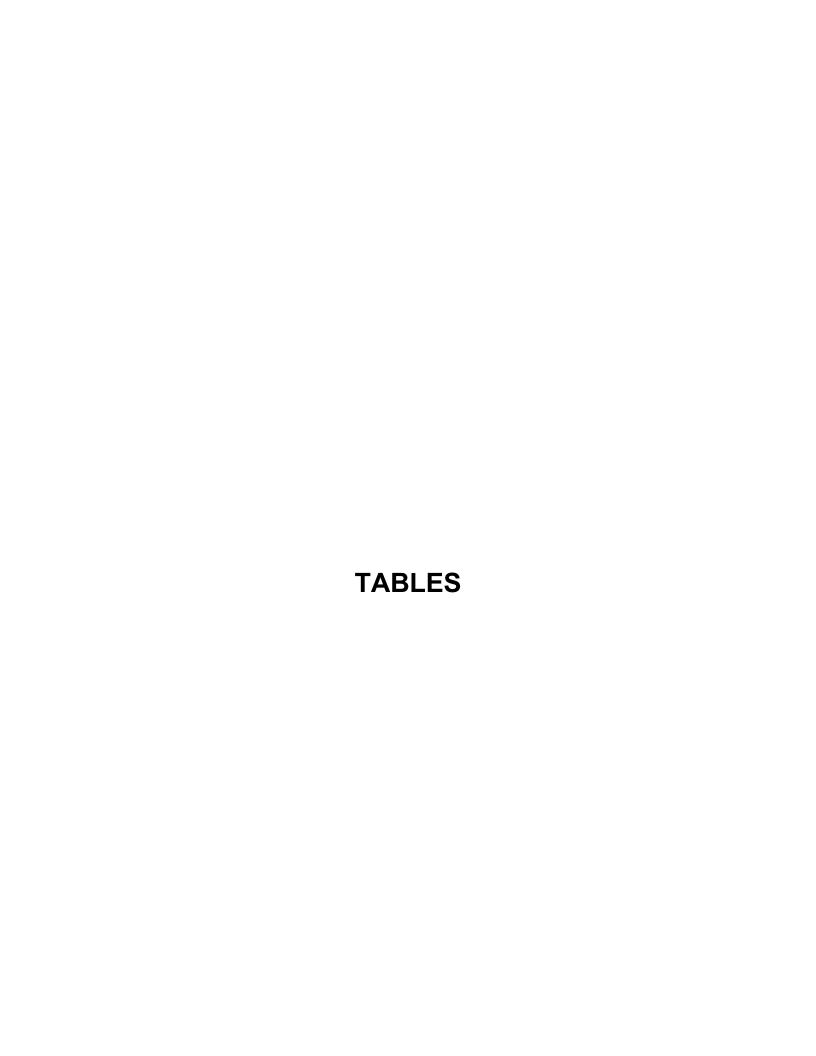


Table 1
Hess Corporation - Former Port Reading Complex
750 Cliff Road
Port Reading, New Jersey
Historic Temporary Well Sampling

Sample ID:	NJ Groundwater Criteria (NJAC	TR-TW-1	TR-TW-2	TR-TW-3	TR-TW-4	TR-TW-5	TR-TW-6	TR-TW-7	TR-TW-8	TR-TW-9	TR-TW-10	TR-TW-11	TR-TW-12	TR-TW-13	TR-TW-15	TR-TW-16	TR-TW-17
Sample Date	7:9C 7/07)	10/13/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/14/2009	10/21/2009	10/21/2009	10/22/2009	10/22/2009	10/22/2009	10/22/2009
Semi-Volatile Organic Compo	unds (SVOCs)																
Benzo(a)anthracene	0.1	6.2	13.9	ND	7.14	ND	ND	ND	24.5	10.6	5.49	ND	ND	1.7	ND	0.436	ND
Benzo(a)pyrene	0.1	4.03	5.55	ND	ND	ND	ND	ND	34.6	3.04	1.49	ND	ND	0.76	ND	0.336	ND
Benzo(b)fluoranthene	0.2	9.4	9.22	ND	ND	ND	ND	ND	48.4	4.62	1.95	ND	ND	1.44	ND	0.555	ND
Benzo(k)fluoranthene	0.5	4	4.54	ND	ND	ND	ND	ND	22.3	2.09	0.922 J	ND	ND	0.287	ND	0.285	ND
Bis(2-Ethylhexyl) phthalate	2	NA															
Chrysene	5	4.22	8.65	ND	5.35	ND	ND	ND	18.9	6.11	2.54	ND	ND	1.41	ND	0.463	ND
Dibenzo(a,h)anthracene	0.3	0.555	3.11	ND	ND	ND	ND	ND	11.8	ND	ND	ND	ND	0.23	ND	ND	ND
1,4 Dioaxane	10	NA															
Indeno(1,2,3-cd)pyrene	0.2	2.7	6.74	ND	ND	ND	ND	ND	21.7	3.42	ND	ND	ND	0.445	ND	1.28	ND
Naphthalene	300	15.3	134	175	15.7	341	437	357	23,500	1,550	1,350	ND	ND	728	3.51	0.946	2.04
Phenanthrene	100	10.7	91.5	ND	36.8	ND	4.62	5.24	2,270	82.9	33	ND	ND	51.5	ND	0.271	0.126
Pyrene	200	12.2	68.1	ND	11.6	ND	2.48	1.67	293	21.5	8.34	ND	ND	5.9	0.185	0.493	ND
bis(2-Ethylhexyl)phthalate	3	7.5	1,080	ND	15.4	ND	ND	ND	ND	ND	20.2	ND	ND	10.6	ND	5.4	ND
2-Methylnaphthalene	30	19.1	685	225	75.3	111	281	242	33,600	1,950	1,360	ND	ND	632	3.7	ND	1.4 J
Total Semi-Volatile (TIC)	500	286 J	5,660 J	5,473 J	7,520	6,580 J	7,490 J	3,339 J	106,000 J	20,520 J	16,120 J	ND	ND	7,570 J	241.1 J	11.1 J	21.8 J
<b>Volatile Organic Compounds</b>	(SVOCs)																
Benzene	1	ND	13.9	76.4	6.7	15,800	21,900	1,420	16,700	3,320	9,810	ND	ND	7,930	4.3	1.5	9.1
cis-1,2-Dichloroethene	70	0.3 J	ND	2,300	ND												
Ethylbenzene	700	30	23.2	84.1	1.2	5,120	2,080	933	93,400	1,640	2,970	ND	ND	1,950	109	2.5	8.6
Methyl Tert Butyl Ether	70	14.4	16.7	94.2	74.8	455,000	1,080,000	1,360	365,000	335	252,000	ND	ND	175,000	3	6.7	49.4
Tert Butyl Alcohol	100	ND															
Toluene	600	ND	2.3 J	33.9	1	ND	22,500	26.5	123,000	6,320	6,550	ND	ND	9,960	1.3	7.8	27.6
Vinyl chloride	1	ND	171	ND													
Xylene (total)	1,000	1.2	14.3	793	0.98 J	4,870	10,300	65	533,000	7,530	11,600	ND	ND	7,370	186	7.2	25.9
Total Volatile (TIC)	500	732 J	2,040 J	1,914 J	275 J	21,100 J	ND	4,630 J	449,000 J	16,140 J	17,730 J	ND	ND	50,000 J	175.3 J	ND	48.2 J

Sample ID:	NJ Groundwater Criteria (NJAC	DC-TW-1	DC-TW-2	DC-TW-3	HS8-TW-1	HS8-TW-2	HS8-TW-3	HS8-TW-4	HS8-TW-5	HS8-TW-6	HS8-TW-7
Sample Date	7:9C 7/07)	6/20/2012	6/20/2012	6/20/2012	9/22/2010	9/22/2010	9/22/2010	9/22/2010	9/22/2010	9/22/2010	9/22/2010
Semi-Volatile Organic Compo	unds (SVOCs)										
Benzo(a)anthracene	0.1	0.205	1.99	2.01	ND	0.35	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.1	ND	0.900	1.34	ND	0.111	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.2	ND	0.895	1.69	ND	0.125	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.5	ND	0.550	1.28	ND	0.0704	ND	ND	ND	ND	ND
Bis(2-Ethylhexyl) phthalate	2	ND	3.54	2.47	NA						
Chrysene	5	ND	1.26 J	2.64	ND	0.389	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	0.3	ND	ND	ND*	ND						
1,4 Dioaxane	10	11.6	49.7	2.15	NA						
Indeno(1,2,3-cd)pyrene	0.2	ND	0.325	0.976 J	ND						
Naphthalene	300	26.5	281	6.33	ND	14.7	ND	ND	ND	ND	ND
Phenanthrene	100	16.1	39.9	18.5	0.113	62.3	0.68	ND	0.16	ND	ND
Pyrene	200	1.20	6.20	7.53	0.121	2.13	0.634	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	3	ND	3.54	2.47	2.5	3.2	7.7	ND	ND	ND	ND
2-Methylnaphthalene	30	50.6	132	2.39	ND	829	ND	ND	ND	ND	ND
Total Semi-Volatile (TIC)	500	434 J	2400 J	169 J	21.3	490	884.6	ND	6.7	ND	ND
Volatile Organic Compounds	(SVOCs)										
Benzene	1	59.4	4,490	ND	0.41	490	ND	ND	ND	ND	ND
1,1-Dichloroethene		8.27	ND*	ND							
cis-1,2-Dichloroethene	70	ND									
Ethylbenzene	700	44.3	880	ND	ND	3	ND	ND	ND	ND	ND
Methyl Tert Butyl Ether	70	24.7	4,130	15.4	1.9	28.4	ND	0.76	2.1	ND	41.1
Tert Butyl Alcohol	100	NA	NA	NA	60.6	1,190	ND	ND	ND	ND	ND
Toluene	600	13.3	300	ND	188	6.4	21.4	0.37	8.8	12.3	3.1
Vinyl chloride	1	9.06	ND*	ND							
Xylene (total)	1,000	114	2,020	ND	ND	1.4	ND	ND	ND	ND	ND
Total Volatile (TIC)	500	708 J	4,230 J	ND	ND	5,630	604	ND	ND	ND	ND

#### Table 2

#### AOC 10: Truck Loading Rack

#### Hess Corporation - Former Port Reading Complex

#### 750 Cliff Road

#### Port Reading, New Jersey

2015 Groundwater Analytical Results

	N.I. Groundwater			•										1	1	1						
		NJ Groundwater	NJ Interim Groundwater																			
Client Sample ID:		Criteria (NJAC	Criteria (NJAC	TR-1R	TR-2R	TR-3RR	TR-4R	TR-4D	TR-4DD	TR-5R	TR-6	TR-6D	AB-4D	PER-2	PER-2D	PER-3	PER-3D	PER-9	PER-9D	PER-9DD	PER-10	PER-10D
		7:9C 7/07)	7:9C 11/15)2																			
Lab Sample ID:				JC8967-1	JC8967-4	JC8967-6	JC8967-8	JC8967-9	JC8967-10	JC8967-7	JC8967-2	JC8967-3	JC9218-4	JC9071-8	JC9071-9	JC9218-5	JC9218-6	JC9218-1	JC9218-2	JC9218-3	JC9218-7	JC9218-8
Date Sampled:				11/19/2015	11/19/2015 r Ground Water	11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/19/2015 Ground Water	11/23/2015	11/20/2015	11/20/2015	11/23/2015	11/23/2015	11/23/2015	11/23/2015	11/23/2015	11/23/2015	11/23/2015
Matrix: GC/MS Volatiles (SW846	-		1	Ground wate	r Ground Water	Ground water	Ground Water	Ground Water	Ground Wate	r Ground Water	Ground water	Ground water	Ground water	Ground water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground water	Ground Water	Ground water
Acetone	ug/l	6000	-	ND (3.3)	ND (3.3)	ND (17)	ND (3.3)	ND (33)	ND (3.3)	ND (33)	ND (3.3)	ND (3.3)	ND (3.3)	8.2 J	ND (3.3)							
Benzene	ug/l	1	-	ND (0.24)	912	3.8	52.5	6.1	ND (0.24)	1200	426	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	2
Bromochloromethane	ug/l	-	-	ND (0.37)	ND (0.37)	ND (1.9)	ND (0.37)	ND (3.7)	ND (0.37)	ND (3.7)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)
Bromodichloromethane Bromoform	ug/l ug/l	1 4	-	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	ND (1.1) ND (1.2)	ND (0.23) ND (0.23)	ND (2.3) ND (2.3)	ND (0.23) ND (0.23)	ND (2.3) ND (2.3)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)	1.5 ND (0.23)	ND (0.23) ND (0.23)	ND (0.23) ND (0.23)
Bromomethane	ug/l	10	-	ND (0.42)	ND (0.42)	ND (1.2)	ND (0.42)	ND (4.2)	ND (0.42)	ND (4.2)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)
2-Butanone (MEK)	ug/l	300	-	ND (5.6)	11.6	ND (28)	ND (5.6)	ND (56)	ND (5.6)	ND (56)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)
Carbon disulfide	ug/l	700	-	ND (0.25)	ND (0.25)	ND (1.3)	ND (0.25)	ND (2.5)	ND (0.25)	ND (2.5)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	0.38 J	0.89 J
Carbon tetrachloride	ug/l	1	-	ND (0.22)	ND (0.22)	ND (1.1)	ND (0.22)	ND (2.2)	ND (0.22)	ND (2.2)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Chlorobenzene Chloroethane	ug/l ug/l	50	- 5	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.93) ND (1.7)	0.19 J ND (0.34)	ND (1.9) ND (3.4)	ND (0.19) ND (0.34)	ND (1.9) ND (3.4)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)	ND (0.19) ND (0.34)
Chloroform	ug/l		-	ND (0.34)	ND (0.34)	ND (1.7)	ND (0.34)	ND (3.4)	ND (0.34)	ND (3.4)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	0.66 J	6.7	1.1	ND (0.34)
Chloromethane	ug/l	-	-	ND (0.41)	ND (0.41)	ND (2.0)	ND (0.41)	ND (4.1)	ND (0.41)	ND (4.1)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)
Cyclohexane	ug/l	-	-	ND (0.28)	39.4	ND (1.4)	62	ND (2.8)	ND (0.28)	25.4 J	4.9 J	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)
1,2-Dibromo-3-chloropropane	ug/l	0.02	-	ND (0.99)	ND (0.99)	ND (5.0)	ND (0.99)	ND (9.9)	ND (0.99)	ND (9.9)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)	ND (0.99)
Dibromochloromethane 1,2-Dibromoethane	ug/l ug/l	0.03	-	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	ND (0.77) ND (1.2)	ND (0.15) ND (0.23)	ND (1.5) ND (2.3)	ND (0.15) ND (0.23)	ND (1.5) ND (2.3)	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)	0.23 J 0.25 J	ND (0.15) ND (0.23)	ND (0.15) ND (0.23)
1,2-Dichlorobenzene	ug/l	600	-	ND (0.23)	ND (0.23)	ND (0.93)	ND (0.23)	ND (1.9)	0.21 J	ND (1.9)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.19)	ND (0.23)	ND (0.23)	ND (0.19)	ND (0.23)	ND (0.23)
1,3-Dichlorobenzene	ug/l	600	-	ND (0.23)	ND (0.23)	ND (1.1)	ND (0.23)	ND (2.3)	ND (0.23)	ND (2.3)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)
1,4-Dichlorobenzene	ug/l		-	ND (0.27)	ND (0.27)	ND (1.4)	ND (0.27)	ND (2.7)	ND (0.27)	ND (2.7)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)
Dichlorodifluoromethane	ug/l	1000	-	ND (0.90)	ND (0.90)	ND (4.5)	ND (0.90)	ND (9.0)	ND (0.90)	ND (9.0)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)
1,1-Dichloroethane 1,2-Dichloroethane	ug/l ug/l	50	-	0.31 J ND (0.18)	ND (0.17) ND (0.18)	ND (0.86) ND (0.90)	ND (0.17) ND (0.18)	ND (1.7) ND (1.8)	0.77 J ND (0.18)	ND (1.7) ND (1.8)	ND (0.17) ND (0.18)	ND (0.17) ND (0.18)	0.46 J ND (0.18)	ND (0.17) ND (0.18)	0.35 J ND (0.18)	ND (0.17) ND (0.18)	ND (0.17) ND (0.18)	ND (0.17) ND (0.18)	ND (0.17) ND (0.18)	ND (0.17) ND (0.18)	ND (0.17) ND (0.18)	0.33 J ND (0.18)
1,1-Dichloroethene	ug/l	1	-	2.1	ND (0.51)	ND (2.6)	ND (0.51)	ND (5.1)	3.1	ND (5.1)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)
cis-1,2-Dichloroethene	ug/l	70	-	ND (0.27)	ND (0.27)	ND (1.4)	ND (0.27)	ND (2.7)	5.4	ND (2.7)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	0.39 J	ND (0.27)						
trans-1,2-Dichloroethene	ug/l	100	-	ND (0.65)	ND (0.65)	ND (3.2)	ND (0.65)	ND (6.5)	ND (0.65)	ND (6.5)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)
1,2-Dichloropropane	ug/l	1	-	ND (0.39) ND (0.21)	ND (0.39) ND (0.21)	ND (2.0) ND (1.0)	ND (0.39) ND (0.21)	ND (3.9) ND (2.1)	ND (0.39) ND (0.21)	ND (3.9) ND (2.1)	ND (0.39) ND (0.21)	ND (0.39) ND (0.21)	ND (0.39)	ND (0.39) ND (0.21)	ND (0.39) ND (0.21)	ND (0.39) ND (0.21)	ND (0.39) ND (0.21)	ND (0.39)	ND (0.39) ND (0.21)	ND (0.39) ND (0.21)	ND (0.39)	ND (0.39)
cis-1,3-Dichloropropene trans-1,3-Dichloropropene	ug/l ug/l	-	-	ND (0.21)	ND (0.21)	ND (1.0)	ND (0.21)	ND (2.1)	ND (0.21)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21) ND (0.19)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21) ND (0.19)	ND (0.21)	ND (0.21)	ND (0.21) ND (0.19)	ND (0.21) ND (0.19)
Ethylbenzene	ug/l	700	-	ND (0.27)	365	ND (1.3)	111	ND (2.7)	ND (0.27)	100	49.9	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	0.28 J
Freon 113	ug/l	-	20000	ND (0.52)	ND (0.52)	ND (2.6)	ND (0.52)	ND (5.2)	ND (0.52)	ND (5.2)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)
2-Hexanone	ug/l	-	300	ND (1.7)	ND (1.7)	ND (8.7)	ND (1.7)	ND (17)	ND (1.7)	ND (17)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)
Isopropylbenzene Methyl Acetate	ug/l ug/l	700 7000	-	ND (0.23) ND (1.9)	12.9 ND (1.9)	ND (1.2) ND (9.4)	10.5 ND (1.9)	ND (2.3) ND (19)	ND (0.23) ND (1.9)	16.4 ND (19)	1.2 ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)	ND (0.23) ND (1.9)
Methylcyclohexane	ug/l	-	-	ND (0.22)	33.3	ND (9.4)	46.5	ND (19)	ND (0.22)	10.2 J	2.1 J	ND (0.22)	ND (1.9)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (1.9)	ND (0.22)	ND (0.22)	1.1 J	ND (1.9)
Methyl Tert Butyl Ether	ug/l	70	-	ND (0.24)	2480	1530	7.2	9120	6.2	1370	6690	20.5	2.9	ND (0.24)	693	ND (0.24)	77	ND (0.24)	7.5	0.31 J	ND (0.24)	25.7
4-Methyl-2-pentanone(MIBK)	ug/l		-	ND (1.0)	16	ND (5.1)	4.1 J	ND (10)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Methylene chloride	ug/l	3 100	-	ND (0.73)	ND (0.73)	ND (3.6)	ND (0.73)	ND (7.3)	ND (0.73)	ND (7.3)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)
Styrene Tert Butyl Alcohol	ug/l ug/l	100	-	ND (0.27) ND (2.8)	ND (0.27) 151	ND (1.4) 1850	ND (0.27)	ND (2.7) 39400	ND (0.27) 16.4	ND (2.7) 1240	ND (0.27) 1720	ND (0.27) ND (2.8)	ND (0.27) 23	ND (0.27) ND (2.8)	ND (0.27) 204	ND (0.27) ND (2.8)	ND (0.27) 45.8	ND (0.27) ND (2.8)	ND (0.27) 23.1	ND (0.27) ND (2.8)	ND (0.27) ND (2.8)	ND (0.27) 35
1,1,2,2-Tetrachloroethane	ug/l	_	-	ND (0.21)	ND (0.21)	ND (1.0)	ND (0.21)	ND (2.1)	ND (0.21)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
Tetrachloroethene	ug/l	1	-	ND (0.40)	ND (0.40)	ND (2.0)	ND (0.40)	ND (4.0)	ND (0.40)	ND (4.0)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Toluene	ug/l	600	-	ND (0.16)	449	ND (0.81)	37.2	ND (1.6)	ND (0.16)	19.2	8.7	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)
1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene	ug/l	- 9	-	ND (0.23) ND (0.21)	ND (0.23) ND (0.21)	ND (1.1) ND (1.0)	ND (0.23) ND (0.21)	ND (2.3) ND (2.1)	ND (0.23) ND (0.21)	ND (2.3) ND (2.1)	ND (0.23) ND (0.21)	ND (0.23) ND (0.21)	ND (0.23)	ND (0.23) ND (0.21)	ND (0.23)	ND (0.23)	ND (0.23)					
1.1.1-Trichloroethane	ug/l ug/l	30	-	0.78 J	ND (0.21)	ND (1.0)	ND (0.21)	ND (2.1)	ND (0.21)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21) ND (0.25)	ND (0.21)	ND (0.21) ND (0.25)	ND (0.21) ND (0.25)	ND (0.21) ND (0.25)					
1,1,2-Trichloroethane	ug/l	3	-	ND (0.21)	ND (0.21)	ND (1.1)	ND (0.21)	ND (2.1)	ND (0.21)	ND (2.1)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.23)	ND (0.23)	ND (0.21)	ND (0.23)	ND (0.21)				
Trichloroethene	ug/l	1	-	ND (0.22)	ND (0.22)	ND (1.1)	ND (0.22)	ND (2.2)	3.2	ND (2.2)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)
Trichlorofluoromethane	ug/l		-	ND (0.43)	ND (0.43)	ND (2.1)	ND (0.43)	ND (4.3)	ND (0.43)	ND (4.3)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Vinyl chloride m,p-Xylene	ug/l		-	ND (0.15) ND (0.38)	ND (0.15) 778	ND (0.74) ND (1.9)	ND (0.15) 124	ND (1.5) ND (3.8)	ND (0.15) ND (0.38)	ND (1.5) 22.3	ND (0.15) 8.2	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)	ND (0.15) ND (0.38)
o-Xylene	ug/l		-	ND (0.38)	341	ND (1.9)	50.3	ND (3.6)	ND (0.36)	11.2	13.2	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.38)	ND (0.38)	ND (0.36)	ND (0.36)	ND (0.36)
Xylene (total)	ug/l		-	ND (0.17)	1120	ND (0.83)	174	ND (1.7)	ND (0.17)	33.5	21.3	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)
Total TIC, Volatile	ug/l		-	0	2840 J	0	1422 J	470 J	0	645 J	210.9 J	0	52 J	5.6 J	6.1 J	0	0	0	0	0	0	0
Total Alkanes GC/MS Semi-volatiles (SW846	ug/l	-	-	0	613 J	0	522 J	0	0	681 J	165.5 J	0	0	0	0	0	0	0	0	0	0	0
2-Chlorophenol	ug/l	40	-	ND (1.4)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)
4-Chloro-3-methyl phenol	ug/l		100	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.3)	ND (1.4)	ND (1.4)	ND (1.3)	ND (1.4)	ND (1.4)	ND (1.3)	ND (1.3)	ND (1.4)	ND (1.3)						
2,4-Dichlorophenol	ug/l		-	ND (1.8)	7.1	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.7)	ND (1.6)	ND (1.6)	ND (1.7)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.7)	ND (1.6)	ND (1.6)
2,4-Dimethylphenol	ug/l		-	ND (2.0)	ND (2.0)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (2.0)	ND (1.8)	ND (1.8)	ND (1.9)	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.8)	ND (1.9)	ND (1.8)	ND (1.8)
2,4-Dinitrophenol 2-Methylphenol	ug/l ug/l		- 50	ND (7.2) ND (1.4)	ND (6.9) ND (1.4)	ND (6.9) ND (1.3)	ND (6.6) ND (1.3)	ND (6.9) ND (1.3)	ND (6.9) ND (1.3)	ND (6.6) ND (1.3)	ND (6.9) ND (1.3)	ND (6.9) ND (1.4)	ND (6.5) ND (1.3)	ND (6.5) ND (1.3)	ND (6.9) ND (1.3)	ND (6.5) ND (1.3)	ND (6.5) ND (1.3)	ND (6.5) ND (1.3)	ND (6.5) ND (1.3)	ND (6.7) ND (1.3)	ND (6.5) ND (1.3)	ND (6.5) ND (1.3)
3&4-Methylphenol	ug/l		50	ND (1.4)	4.7	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.4)	ND (1.3)	1.1 J	ND (1.3)							
2-Nitrophenol	ug/l		-	ND (2.0)	ND (2.0)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)	ND (2.0)	ND (1.9)									
4-Nitrophenol	ug/l	-	-	ND (1.0)	ND (0.96)	ND (0.95)	ND (0.93)	ND (0.95)	ND (0.95)	ND (0.93)	ND (0.95)	ND (0.96)	ND (0.91)	ND (0.91)	ND (0.95)	ND (0.91)	ND (0.91)	ND (0.91)	ND (0.91)	ND (0.94)	ND (0.91)	ND (0.91)
Phenol	ug/l		-	ND (0.60)	26.1	ND (0.58)	ND (0.56)	ND (0.58)	ND (0.58)	24.5	7.9	ND (0.58)	ND (0.55)	ND (0.55)	ND (0.58)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.56)	ND (0.55)	ND (0.55)
2,3,4,6-Tetrachlorophenol 2,4,5-Trichlorophenol	ug/l ug/l		-	ND (1.5) ND (1.9)	ND (1.5) ND (1.8)	ND (1.5) ND (1.8)	ND (1.4) ND (1.7)	ND (1.5) ND (1.8)	ND (1.5) ND (1.8)	ND (1.4) ND (1.7)	ND (1.5) ND (1.8)	ND (1.5) ND (1.8)	ND (1.4) ND (1.7)	ND (1.4) ND (1.7)	ND (1.5) ND (1.8)	ND (1.4) ND (1.7)	ND (1.4) ND (1.7)	ND (1.4) ND (1.7)	ND (1.4) ND (1.7)	ND (1.4) ND (1.8)	ND (1.4) ND (1.7)	ND (1.4) ND (1.7)
2,4,6-Trichlorophenol	ug/I		-	ND (1.9)	ND (1.6)	ND (1.6)	ND (1.7)	ND (1.6)	ND (1.6)	ND (1.7)	ND (1.6)	ND (1.6)	ND (1.7) ND (1.5)	ND (1.7) ND (1.5)	ND (1.6)	ND (1.7) ND (1.5)	ND (1.7) ND (1.5)	ND (1.7) ND (1.5)	ND (1.7)	ND (1.6)	ND (1.7) ND (1.5)	ND (1.7) ND (1.5)
Acenaphthene	ug/l		-	ND (0.32)	14.2	ND (0.31)	ND (0.30)	ND (0.31)	ND (0.31)	ND (0.30)	ND (0.31)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.31)	ND (0.30)						
Acenaphthylene	ug/l		100	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.20)	ND (0.20)	ND (0.21)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.21)	ND (0.20)	ND (0.20)

#### Table 2

#### AOC 10: Truck Loading Rack

#### Hess Corporation - Former Port Reading Complex

#### 750 Cliff Road

#### Port Reading, New Jersey

2015 Groundwater Analytical Results

		NJ Groundwater	NJ Interim Groundwater																			
Client Sample ID:		Criteria (NJAC 7:9C 7/07)	Criteria (NJAC 7:9C 11/15)2	TR-1R	TR-2R	TR-3RR	TR-4R	TR-4D	TR-4DD	TR-5R	TR-6	TR-6D	AB-4D	PER-2	PER-2D	PER-3	PER-3D	PER-9	PER-9D	PER-9DD	PER-10	PER-10D
Lab Sample ID:			,_	JC8967-1	JC8967-4	JC8967-6	JC8967-8	JC8967-9	JC8967-10	JC8967-7	JC8967-2	JC8967-3	JC9218-4	JC9071-8	JC9071-9	JC9218-5	JC9218-6	JC9218-1	JC9218-2	JC9218-3	JC9218-7	JC9218-8
Date Sampled: Matrix:				11/19/2015 Ground Water	11/19/2015 Ground Water	11/19/2015 Ground Water	11/19/2015 Ground Water	11/19/2015 Ground Wate	11/19/2015 r Ground Water	11/19/2015 Ground Water	11/19/2015 Ground Water	11/19/2015 Ground Water	11/23/2015 Ground Water	11/20/2015 Ground Water	11/20/2015 Ground Water	11/23/2015 Ground Water	11/23/2015 Ground Water	11/23/2015 Ground Water	11/23/2015 Ground Water	11/23/2015 Ground Water	11/23/2015 Ground Water	11/23/2015 Ground Water
Acetophenone	ug/l	700	-	ND (0.40)	ND (0.39)	ND (0.38)	ND (0.37)	ND (0.38)	ND (0.38)	ND (0.37)	ND (0.38)	ND (0.39)	ND (0.36)	ND (0.36)	ND (0.38)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.36)	ND (0.38)	ND (0.36)	ND (0.36)
Anthracene	ug/l	2000	-	ND (0.21)	7.5	ND (0.20)	ND (0.19)	ND (0.20)	ND (0.20)	ND (0.19)	ND (0.20)	ND (0.20)	ND (0.19)	ND (0.19)	ND (0.20)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)
Atrazine	ug/l	3	-	ND (0.46)	ND (0.45)	ND (0.45)	ND (0.43)	ND (0.45)	ND (0.45)	ND (0.43)	ND (0.45)	ND (0.45)	ND (0.42)	ND (0.42)	ND (0.45)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.44)	ND (0.42)	ND (0.42)
Benzaldehyde Benzo(a)anthracene	ug/l ug/l	- 0.1	-	ND (0.74)	ND (0.71) 5.3	ND (0.71)	ND (0.69)	ND (0.71)	ND (0.71)	ND (0.69)	ND (0.71)	ND (0.71)	ND (0.67)	ND (0.67)	ND (0.71)	ND (0.67)	ND (0.67)	ND (0.67)	ND (0.67)	ND (0.69)	ND (0.67)	ND (0.67)
Benzo(q,h,i)perylene	ug/l	-	100	ND (0.34)	1.3	ND (0.33)	ND (0.32)	ND (0.33)	ND (0.33)	ND (0.32)	ND (0.33)	ND (0.33)	ND (0.31)	ND (0.31)	ND (0.33)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.32)	ND (0.31)	ND (0.31)
4-Bromophenyl phenyl ether	ug/l	-	-	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.25)	ND (0.26)	ND (0.26)	ND (0.25)	ND (0.26)	ND (0.26)	ND (0.25)	ND (0.25)	ND (0.26)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.26)	ND (0.25)	ND (0.25)
Butyl benzyl phthalate	ug/l	100	-	ND (0.24)	ND (0.24)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.24)	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)
1,1'-Biphenyl 2-Chloronaphthalene	ug/l ug/l	400 600	-	ND (0.30) ND (0.38)	11.9 ND (0.36)	ND (0.29) ND (0.36)	ND (0.28) ND (0.35)	ND (0.29) ND (0.36)	ND (0.29) ND (0.36)	ND (0.28) ND (0.35)	ND (0.29) ND (0.36)	ND (0.29) ND (0.36)	ND (0.27) ND (0.34)	ND (0.27) ND (0.34)	ND (0.29) ND (0.36)	ND (0.27) ND (0.34)	ND (0.27) ND (0.34)	ND (0.27) ND (0.34)	ND (0.27) ND (0.34)	ND (0.28) ND (0.35)	ND (0.27) ND (0.34)	ND (0.27) ND (0.34)
4-Chloroaniline	ug/l	30	-	ND (0.33)	ND (0.32)	ND (0.32)	ND (0.31)	ND (0.32)	ND (0.32)	ND (0.31)	ND (0.32)	ND (0.32)	ND (0.30)	ND (0.30)	ND (0.32)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.31)	ND (0.30)	ND (0.30)
Carbazole	ug/l	-	-	ND (0.18)	6.2	ND (0.18)	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.17)	ND (0.17)	ND (0.18)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)
Caprolactam	ug/l	-	5000	ND (0.45)	ND (0.43)	ND (0.43)	ND (0.42)	ND (0.43)	ND (0.43)	ND (0.42)	ND (0.43)	ND (0.43)	10.2	8 ND (0.16)	0.87 J	3.3	ND (0.41)	16.6	8.9	1.6 J	4.2	ND (0.41)
Chrysene bis(2-Chloroethoxy)methane	ug/l ug/l	- -	-	ND (0.18) ND (0.46)	4.2 ND (0.45)	ND (0.17) ND (0.44)	ND (0.17) ND (0.43)	ND (0.17) ND (0.44)	ND (0.17) ND (0.44)	ND (0.17) ND (0.43)	ND (0.17) ND (0.44)	ND (0.17) ND (0.45)	ND (0.16) ND (0.42)	ND (0.16) ND (0.42)	ND (0.17) ND (0.44)	ND (0.16) ND (0.42)	ND (0.16) ND (0.42)	ND (0.16) ND (0.42)	ND (0.16) ND (0.42)	ND (0.17) ND (0.43)	ND (0.16) ND (0.42)	ND (0.16) ND (0.42)
bis(2-Chloroethyl)ether	ug/l	7	-	ND (0.48)	ND (0.46)	ND (0.46)	ND (0.44)	ND (0.46)	ND (0.46)	ND (0.44)	ND (0.46)	ND (0.46)	ND (0.43)	ND (0.43)	ND (0.46)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.45)	ND (0.43)	ND (0.43)
bis(2-Chloroisopropyl)ether	ug/l	300	-	ND (0.45)	ND (0.43)	ND (0.43)	ND (0.41)	ND (0.43)	ND (0.43)	ND (0.41)	ND (0.43)	ND (0.43)	ND (0.41)	ND (0.41)	ND (0.43)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.42)	ND (0.41)	ND (0.41)
4-Chlorophenyl phenyl ether	ug/l	-	-	ND (0.42)	ND (0.41)	ND (0.40)	ND (0.39)	ND (0.40)	ND (0.40)	ND (0.39)	ND (0.40)	ND (0.41)	ND (0.38)	ND (0.38)	ND (0.40)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.39)	ND (0.38)	ND (0.38)
2,4-Dinitrotoluene 2,6-Dinitrotoluene	ug/l ug/l	-	-	ND (0.35) ND (0.28)	ND (0.34) ND (0.27)	ND (0.34) ND (0.27)	ND (0.33) ND (0.26)	ND (0.34) ND (0.27)	ND (0.34) ND (0.27)	ND (0.33) ND (0.26)	ND (0.34) ND (0.27)	ND (0.34) ND (0.27)	ND (0.32) ND (0.26)	ND (0.32) ND (0.26)	ND (0.34) ND (0.27)	ND (0.32) ND (0.26)	ND (0.32) ND (0.26)	ND (0.32) ND (0.26)	ND (0.32) ND (0.26)	ND (0.33) ND (0.26)	ND (0.32) ND (0.26)	ND (0.32) ND (0.26)
3,3'-Dichlorobenzidine	ug/l	30	-	ND (0.62)	ND (0.60)	ND (0.59)	ND (0.57)	ND (0.59)	ND (0.59)	ND (0.57)	ND (0.59)	ND (0.60)	ND (0.56)	ND (0.56)	ND (0.59)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.58)	ND (0.56)	ND (0.56)
1,4-Dioxane	ug/l	-	0.4	ND (0.79)	ND (0.76)	ND (0.75)	ND (0.73)	1.3	0.78 J	ND (0.73)	ND (0.75)	ND (0.76)	3.4	ND (0.72)	ND (0.75)	ND (0.72)	ND (0.72)	ND (0.72)	ND (0.72)	ND (0.74)	ND (0.72)	4.3
Dibenzofuran Di-n-butyl phthalate	ug/l ug/l	- 700	-	ND (0.25) ND (0.64)	ND (0.24) ND (0.62)	ND (0.24) ND (0.61)	ND (0.23) ND (0.59)	ND (0.24) ND (0.61)	ND (0.24) ND (0.61)	ND (0.23) ND (0.59)	ND (0.24) ND (0.61)	ND (0.24) ND (0.62)	ND (0.23) ND (0.58)	ND (0.23) ND (0.58)	ND (0.24) ND (0.61)	ND (0.23) ND (0.58)	ND (0.23) ND (0.58)	ND (0.23) ND (0.58)	ND (0.23) ND (0.58)	ND (0.24) ND (0.60)	ND (0.23) ND (0.58)	ND (0.23) ND (0.58)
Di-n-octyl phthalate	ug/l	100	-	ND (0.28)	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.02)	ND (0.25)	ND (0.25)	ND (0.26)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.26)	ND (0.25)	ND (0.25)
Diethyl phthalate	ug/l	6000	-	ND (0.26)	ND (0.25)	ND (0.25)	ND (0.24)	ND (0.25)	ND (0.25)	ND (0.24)	ND (0.25)	ND (0.25)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.24)	ND (0.23)	ND (0.23)
Dimethyl phthalate	ug/l	-	100	ND (0.29)	ND (0.28)	ND (0.28)	ND (0.27)	ND (0.28)	ND (0.28)	ND (0.27)	ND (0.28)	ND (0.28)	ND (0.26)	ND (0.26)	ND (0.28)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.27)	ND (0.26)	ND (0.26)
bis(2-Ethylhexyl)phthalate Fluoranthene	ug/l ug/l	3 300	-	ND (0.61) ND (0.18)	16.3	ND (0.58) ND (0.17)	1.2 J ND (0.16)	ND (0.58) ND (0.17)	ND (0.58) ND (0.17)	ND (0.57) ND (0.16)	ND (0.58) ND (0.17)	ND (0.59) ND (0.17)	ND (0.55) ND (0.16)	ND (0.16)	ND (0.58) ND (0.17)	ND (0.55) ND (0.16)	ND (0.55) ND (0.16)	ND (0.55) ND (0.16)	3.5 ND (0.16)	ND (0.57) ND (0.17)	ND (0.55) ND (0.16)	ND (0.55) ND (0.16)
Fluorene	ug/l	300	-	ND (0.30)	18.1	ND (0.17)	ND (0.28)	ND (0.17)	ND (0.29)	ND (0.28)	ND (0.17)	ND (0.17)	ND (0.10)	ND (0.10)	ND (0.29)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.28)	ND (0.10)	ND (0.10)
Hexachlorobutadiene	ug/l	1	-	ND (0.43)	ND (0.41)	ND (0.41)	ND (0.40)	ND (0.41)	ND (0.41)	ND (0.40)	ND (0.41)	ND (0.41)	ND (0.39)	ND (0.39)	ND (0.41)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.40)	ND (0.39)	ND (0.39)
Hexachlorocyclopentadiene	ug/l	40	-	ND (0.53)	ND (0.51)	ND (0.51)	ND (0.49)	ND (0.51)	ND (0.51)	ND (0.49)	ND (0.51)	ND (0.51)	ND (0.48)	ND (0.48)	ND (0.51)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.50)	ND (0.48)	ND (0.48)
Hexachloroethane Isophorone	ug/l ug/l	40	-	ND (0.32) ND (0.37)	ND (0.31) ND (0.36)	ND (0.30) ND (0.36)	ND (0.29) ND (0.35)	ND (0.30) ND (0.36)	ND (0.30) ND (0.36)	ND (0.29) ND (0.35)	ND (0.30) ND (0.36)	ND (0.31) ND (0.36)	ND (0.29) ND (0.34)	ND (0.29) ND (0.34)	ND (0.30) ND (0.36)	ND (0.29) ND (0.34)	ND (0.29) ND (0.34)	ND (0.29) ND (0.34)	ND (0.29) ND (0.34)	ND (0.30) ND (0.35)	ND (0.29) ND (0.34)	ND (0.29) ND (0.34)
2-Methylnaphthalene	ug/l	-	30	ND (0.32)	55.2	ND (0.31)	2.6	ND (0.31)	ND (0.31)	ND (0.30)	ND (0.31)	ND (0.31)	ND (0.29)	ND (0.29)	ND (0.31)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)
2-Nitroaniline	ug/l	-	-	ND (0.35)	ND (0.34)	ND (0.33)	ND (0.32)	ND (0.33)	ND (0.33)	ND (0.32)	ND (0.33)	ND (0.34)	ND (0.32)	ND (0.32)	ND (0.33)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.33)	ND (0.32)	ND (0.32)
3-Nitroaniline 4-Nitroaniline	ug/l ug/l	-	-	ND (0.29) ND (0.33)	ND (0.28) ND (0.32)	ND (0.28) ND (0.32)	ND (0.27) ND (0.31)	ND (0.28) ND (0.32)	ND (0.28) ND (0.32)	ND (0.27) ND (0.31)	ND (0.28) ND (0.32)	ND (0.28) ND (0.32)	ND (0.26) ND (0.30)	ND (0.26) ND (0.30)	ND (0.28) ND (0.32)	ND (0.26) ND (0.30)	ND (0.26) ND (0.30)	ND (0.26) ND (0.30)	ND (0.26) ND (0.30)	ND (0.27) ND (0.31)	ND (0.26) ND (0.30)	ND (0.26) ND (0.30)
Naphthalene	ug/l	300	-	ND (0.33)	97.7	ND (0.28)	28.7	ND (0.32)	ND (0.28)	2	3	ND (0.28)	ND (0.30)	ND (0.27)	ND (0.28)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.30)
Nitrobenzene	ug/l	6	-	ND (0.57)	ND (0.55)	ND (0.55)	ND (0.53)	ND (0.55)	ND (0.55)	ND (0.53)	ND (0.55)	ND (0.55)	ND (0.52)	ND (0.52)	ND (0.55)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.54)	ND (0.52)	ND (0.52)
N-Nitroso-di-n-propylamine	ug/l	10	-	ND (0.41)	ND (0.40)	ND (0.40)	ND (0.38)	ND (0.40)	ND (0.40)	ND (0.38)	ND (0.40)	ND (0.40)	ND (0.38)	ND (0.38)	ND (0.40)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.39)	ND (0.38)	ND (0.38)
N-Nitrosodiphenylamine Phenanthrene	ug/l ug/l	10 -	-	ND (0.23) ND (0.20)	ND (0.22) 41.3	ND (0.22) ND (0.19)	ND (0.21) ND (0.19)	ND (0.22) ND (0.19)	ND (0.22) ND (0.19)	ND (0.21) ND (0.19)	ND (0.22) ND (0.19)	ND (0.22) ND (0.20)	ND (0.21) ND (0.19)	ND (0.21) ND (0.19)	ND (0.22) ND (0.19)	ND (0.21) ND (0.19)	ND (0.21) ND (0.19)	ND (0.21) ND (0.19)	ND (0.21) ND (0.19)	ND (0.21) ND (0.19)	ND (0.21) ND (0.19)	ND (0.21) ND (0.19)
Pyrene	ug/l	200	-	ND (0.21)	15.8	ND (0.20)	ND (0.19)	ND (0.20)	ND (0.20)	ND (0.19)	ND (0.20)	ND (0.20)	ND (0.19)	ND (0.19)	ND (0.20)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.20)	ND (0.19)	ND (0.19)
1,2,4,5-Tetrachlorobenzene	ug/l	-	-	ND (0.49)	ND (0.47)	ND (0.47)	ND (0.45)	ND (0.47)	ND (0.47)	ND (0.45)	ND (0.47)	ND (0.47)	ND (0.44)	ND (0.44)	ND (0.47)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.46)	ND (0.44)	ND (0.44)
GC/MS Semi-volatiles (SW846						T		T		T	T	T	T	T	T	T	T	T	T	T	T	
4,6-Dinitro-o-cresol	ug/l ug/l	0.3	1	ND (0.098) ND (0.12)	ND (0.095) ND (0.12)	ND (0.094) ND (0.12)	ND (0.091) ND (0.11)	ND (0.094) ND (0.12)	ND (0.094) ND (0.12)	ND (0.091) ND (0.11)	ND (0.094) ND (0.12)	ND (0.095) ND (0.12)	ND (0.090) <sup>e</sup> ND (0.11)	ND (0.090) ND (0.11)	ND (0.094) ND (0.12)	ND (0.090) <sup>e</sup>	ND (0.090) <sup>e</sup> ND (0.11)	ND (0.090) <sup>e</sup> ND (0.11)	ND (0.090) <sup>e</sup> ND (0.11)	ND (0.092) <sup>e</sup> ND (0.11)	ND (0.090) <sup>e</sup> ND (0.11)	ND (0.090) ND (0.11)
Pentachlorophenol Benzo(a)anthracene	ug/I	0.3	-	ND (0.12) ND (0.020)	- (U.12)	ND (0.12)	ND (0.11)	ND (0.12) ND (0.019)	ND (0.12)	ND (0.11)	ND (0.12)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.12)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11) ND (0.019)
Benzo(a)pyrene	ug/l	0.1	-	ND (0.032)	3.41	ND (0.031)	ND (0.030)	ND (0.031)	ND (0.031)	ND (0.030)	ND (0.031)	ND (0.031)	ND (0.030)	ND (0.030)	ND (0.031)	ND (0.030)	ND (0.030)	ND (0.030)	ND (0.030)	ND (0.030)	ND (0.030)	ND (0.030)
Benzo(b)fluoranthene	ug/l	0.2	-	ND (0.023)	4.47				ND (0.022)													ND (0.021)
Benzo(k)fluoranthene Dibenzo(a,h)anthracene	ug/l ug/l	0.5 0.3	-	ND (0.021) ND (0.039)	1.63 0.457	ND (0.020) ND (0.037)	ND (0.020) ND (0.036)	ND (0.020) ND (0.037)	ND (0.020) ND (0.037)	ND (0.020) ND (0.036)	ND (0.020) ND (0.037)	ND (0.021) ND (0.038)	ND (0.019) ND (0.035)	ND (0.019) ND (0.035)	ND (0.020) ND (0.037)	ND (0.019) ND (0.035)	ND (0.019) ND (0.035)	ND (0.019) ND (0.035)	ND (0.019) ND (0.035)	ND (0.020) ND (0.036)	ND (0.019) ND (0.035)	
Hexachlorobenzene	ug/I	0.02	-	ND (0.039)	ND (0.016)	ND (0.037)		ND (0.037)		ND (0.036)		ND (0.036)		ND (0.033)			ND (0.033)	ND (0.035)	ND (0.035)	. ,	ND (0.035)	
Indeno(1,2,3-cd)pyrene	ug/l	0.2	-	ND (0.034)	1.41	ND (0.033)	ND (0.032)	ND (0.033)	ND (0.033)	ND (0.032)	ND (0.033)	ND (0.033)	ND (0.031)	ND (0.031)	ND (0.033)	ND (0.031)	ND (0.031)	ND (0.031)	ND (0.031)	ND (0.032)	ND (0.031)	ND (0.031)
Total TIC, Semi-Volatile	ug/l	-	-	0	1362 J	0	580.1 J	0	0	229.9 J	38.8 J	0	64.5 J	50.7 J	0	0	10 J	0	15.7 J	0	67.2 J	54.5 J
Total Alkanes  Metals Analysis	ug/l	-	-	0	291 J	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aluminum	ug/l	200	-	30200 <sup>f</sup>	741	1510	4450	<200	779	215	996	1010	1290	632	<200	<200	<200	2610	<200	<200	<200	<200
Antimony	ug/l	6	-	<12 <sup>f</sup>	<6.0	<6.0	<6.0	<6.0	<6.0	6.1	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
Arsenic	ug/l	3	-	18.4 <sup>f</sup>	3.5	3.3	18.8	<3.0	<3.0	<3.0	8.4	<3.0	13.5	<3.0	<3.0	<6.0 h	<3.0	5.6	<3.0	<3.0	4.7	<3.0
Arsenic	ug/l	3	-	- ,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	ug/l	6000	-	<400 <sup>†</sup>	<200	<200	<200	256	222	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Beryllium	ug/l	1	-	2.4 f	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium Cadmium	ug/l ug/l	4	-	<6.0 <sup>†</sup>	4.2	<3.0	4.6	6.7	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Calcium	ug/I	-	-	58400 <sup>f</sup>	25000	73800	37900	107000	99700	49100	44400	34500	149000	23000	113000	104000	82400	42400	98600	48700	66200	103000
Chromium	ug/l	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	ug/l	70	-	73.4 <sup>f</sup>	22.2	<10	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cobalt	ug/l	-	100	<100 <sup>f</sup>	<50	<50	<50	<50	<50	<50	<50	<50	<500 <sup>i</sup>	<50	<50	<50	<50	<50	<50	<50	<50	<50
Copper	ug/l	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### Table 2

#### AOC 10: Truck Loading Rack

#### Hess Corporation - Former Port Reading Complex

#### 750 Cliff Road

## Port Reading, New Jersey

2015 Groundwater Analytical Results

Client Sample ID:		NJ Groundwater Criteria (NJAC 7:9C 7/07)	NJ Interim Groundwater Criteria (NJAC 7:9C 11/15)2	TR-1R	TR-2R	TR-3RR	TR-4R	TR-4D	TR-4DD	TR-5R	TR-6	TR-6D	AB-4D	PER-2	PER-2D	PER-3	PER-3D	PER-9	PER-9D	PER-9DD	PER-10	PER-10D
Lab Sample ID:				JC8967-1	JC8967-4	JC8967-6	JC8967-8	JC8967-9	JC8967-10	JC8967-7	JC8967-2	JC8967-3	JC9218-4	JC9071-8	JC9071-9	JC9218-5	JC9218-6	JC9218-1	JC9218-2	JC9218-3	JC9218-7	JC9218-8
Date Sampled:				11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/19/2015	11/23/2015	11/20/2015	11/20/2015	11/23/2015	11/23/2015	11/23/2015	11/23/2015	11/23/2015	11/23/2015	11/23/2015
Matrix:				Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water
Copper	ug/l	1300	-	51.6 <sup>f</sup>	10.2	<10	23.5	<10	<10	<10	<10	<10	<10	27.7	<10	<10	<10	23.7	<10	<10	13.2	<10
Iron	ug/l	300	-	48800 <sup>f</sup>	1870	2620	4610	176	3490	3280	3340	487	2090	2460	<100	1010	131	5550	185	896	2040	123
Lead	ug/l	5	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
Lead	ug/l	5	٠	22.0 <sup>f</sup>	4.3	5.1	22.8	<3.0	<3.0	<3.0	5.2	3.3	<30 <sup>i</sup>	5.5	<3.0	<6.0 <sup>h</sup>	<3.0	3.3	<3.0	<3.0	<3.0	<3.0
Magnesium	ug/l	-		22700 <sup>f</sup>	<5000	5080	<5000	17400	17000	46400	8010	5770	124000	<5000	22700	185000	130000	13600	38000	11900	15000	176000
Manganese	ug/l	50	-	742 <sup>f</sup>	423	591	147	291	138	1240	565	<15	21.4	120	29.4	253	194	70.8	48.5	63.6	98.3	656
Mercury	ug/l	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	ug/l	2		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	ug/l	100	-	40.6 <sup>f</sup>	12	<10	18.1	<10	<10	<10	<10	<10	<100 i	<10	<10	<10	<10	<10	<10	<10	<10	15.2
Nickel	ug/l	100	-	-	-	-	-	-	-	-	-	-	ı	-	-	-	-	-	-	-	-	-
Potassium	ug/l	-	-	<20000 <sup>f</sup>	51800	<10000	18200	<10000	<10000	<10000	<10000	<10000	120000	<10000	<10000	55200	70100	<10000	12300	<10000	<10000	88800
Selenium	ug/l	40	-	<20 <sup>f</sup>	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Silver	ug/l	40	-	<20 <sup>f</sup>	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Silver	ug/l	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium	ug/l	50000		40900 <sup>f</sup>	315000	30700	251000	117000	57200	192000	23300	20100	2230000	29600	69800	1540000	1110000	198000	227000	126000	160000	1320000
Thallium	ug/l	2	-	<4.0 <sup>f</sup>	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20 i	<2.0	<2.0	<4.0 <sup>h</sup>	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vanadium	ug/l	-	-	121 <sup>f</sup>	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Zinc	ug/l	2000	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
Zinc	ug/l	2000	-	104 <sup>f</sup>	49.1	<20	289	<20	<20	<20	<20	<20	<20	66.2	<20	<20	<20	<20	<20	42.5	<20	<20
General Chemistry											•	•	•			•						•
Nitrogen, Ammonia	mg/l	3	-	<0.20	2.9	0.21	1.5	<0.20	<0.20	0.44	0.3	<0.20	6.1	0.56	<0.20	0.22	8.1	<0.20	0.88	<0.20	0.94	18.7

Table 3

AOC 10 - Truck Loading Rack

Hess Corporation - Port Reading Complex (HC-PR)
750 Cliff Road
Port Reading, NJ
2016 Groundwater Sampling Analytical Results

																					•		
Client Sample ID:			NJ Interim	TR-1R	TR-2R	TR-3RR	TR-4R	TR-4D	TR-4DD	TR-5	TR-6	TR-6D	AB-4R	AB-4D	PER-2	PER-2D	PER-3	PER-3D	PER-9	PER-9D	PER-9DD	PER-10	PER-10D
Lab Sample ID: Date Sampled:	NJ Ground Criter		Groundwater	JC31908-3 11/16/2016	JC31908-4 11/16/2016	JC31908-10 11/16/2016	JC32172-6 11/21/2016	JC32172-7 11/21/2016	JC32172-8 11/21/2016	JC31908-11 11/16/2016	JC31908-12 11/16/2016	JC31908-13 11/16/2016	JC31999-14 11/17/2016	JC31999-13 11/17/2016	JC31908-5 11/16/2016	JC31908-6 11/16/2016	JC31908-14 11/16/2016	JC31908-15 11/16/2016	JC31908-7 11/16/2016	JC31908-8 11/16/2016	JC31908-9 11/16/2016	JC31999-9 11/17/2016	JC31999-10 11/17/2016
Matrix:	(NJAC7:90	C	riteria (NJAC7:9C 11/15)	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
GC/MS Volatiles (SW846 8260C)				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Croundwater	Croundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Orounawater
Acetone ug/	/1 6000	)	-	ND (5.0)	ND (5.0)	ND (25)	84	ND (100)	ND (5.0)	ND (50)	ND (50)	ND (5.0)	ND (5.0)	ND (5.0)	9.2 J	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	10.3
Benzene ug/	_		-	ND (0.14)	204	13.2	42.2	5.8 J	ND (0.14)	4490	179	0.40 J	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	0.34 J	ND (0.14)
Bromochloromethane ug/ Bromodichloromethane ug/			-	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (2.3) ND (2.8)	ND (0.46) ND (0.55)	ND (9.3) ND (11)	ND (0.46) ND (0.55)	ND (4.6) ND (5.5)	ND (4.6) ND (5.5)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)	ND (0.46) ND (0.55)
Bromoform ug/				ND (0.34)	ND (0.34)	ND (1.7)	ND (0.34)	ND (6.8)	ND (0.34)	ND (3.4)	ND (3.4)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)
Bromomethane ug/			-	ND (0.46)	ND (0.46)	ND (2.3)	ND (0.46)	ND (9.3)	ND (0.46)	ND (4.6)	ND (4.6)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)
2-Butanone (MEK) ug/ Carbon disulfide ug/			-	ND (1.9) ND (0.33)	14 1.6 J	ND (9.5) ND (1.7)	ND (1.9) ND (0.33)	ND (38) ND (6.6)	ND (1.9) ND (0.33)	ND (19) ND (3.3)	ND (19) ND (3.3)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)	ND (1.9) ND (0.33)
Carbon tetrachloride ug/			-	ND (0.54)	ND (0.54)	ND (1.7)	ND (0.54)	ND (0.0)	ND (0.54)	ND (5.4)	ND (5.4)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)
Chlorobenzene ug/	/1 50		-	ND (0.17)	ND (0.17)	ND (0.87)	0.27 J	ND (3.5)	ND (0.17)	ND (1.7)	ND (1.7)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)
Chloroethane ug/	•		5	ND (0.44)	ND (0.44)	ND (2.2)	ND (0.44)	ND (8.9)	ND (0.44)	ND (4.4)	ND (4.4)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)
Chloroform ug/ Chloromethane ug/				ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (1.1) ND (4.8)	ND (0.23) ND (0.96)	ND (4.5) ND (19)	ND (0.23) ND (0.96)	ND (2.3) ND (9.6)	ND (2.3) ND (9.6)	0.38 J ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)	ND (0.23) ND (0.96)
Cyclohexane ug/	/I -		-	ND (0.73)	76.3	3.6 J	95	ND (15)	ND (0.73)	48.8 J	ND (7.3)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73)	1.2 J
1,2-Dibromo-3-chloropropane ug/			-	ND (0.69)	ND (0.69)	ND (3.4)	ND (0.69)	ND (14)	ND (0.69)	ND (6.9)	ND (6.9)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.69)
Dibromochloromethane ug/ 1,2-Dibromoethane ug/				ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (1.1) ND (1.1)	ND (0.23) ND (0.22)	ND (4.5) ND (4.4)	ND (0.23) ND (0.22)	ND (2.3) ND (2.2)	ND (2.3) ND (2.2)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)	ND (0.23) ND (0.22)
1,2-Dichlorobenzene ug/			-	ND (0.23)	ND (0.23)	ND (1.2)	0.55 J	ND (4.7)	0.24 J	ND (2.3)	ND (2.3)	0.30 J	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)
1,3-Dichlorobenzene ug/	/1 600		-	ND (0.19)	ND (0.19)	ND (0.97)	ND (0.19)	ND (3.9)	ND (0.19)	ND (1.9)	ND (1.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.19)
1,4-Dichlorobenzene ug/ Dichlorodifluoromethane ug/		)		ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (1.1) ND (3.5)	ND (0.21) ND (0.70)	ND (4.3) ND (14)	ND (0.21) ND (0.70)	ND (2.1) ND (7.0)	ND (2.1) ND (7.0)	0.23 J ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)	ND (0.21) ND (0.70)
1,1-Dichloroethane ug/			-	0.30 J	ND (0.70) ND (0.21)	ND (3.3)	ND (0.70)	ND (4.1)	0.69 J	ND (7.0) ND (2.1)	ND (7.0) ND (2.1)	0.94 J	ND (0.70)	0.71 J	ND (0.70) ND (0.21)	0.39 J	ND (0.70)	ND (0.70) ND (0.21)	ND (0.70)	0.29 J	ND (0.70) ND (0.21)	ND (0.70) ND (0.21)	ND (0.70) ND (0.21)
1,2-Dichloroethane ug/	_		-	ND (0.39)	5.8	ND (2.0)	ND (0.39)	ND (7.9)	ND (0.39)	ND (3.9)	ND (3.9)	0.54 J	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.39)
1,1-Dichloroethene ug/ cis-1,2-Dichloroethene ug/			-	2.1 ND (0.31)	ND (0.20) ND (0.31)	ND (1.0) ND (1.5)	ND (0.20) ND (0.31)	ND (4.1) ND (6.2)	<b>2.7</b> 5.1	ND (2.0) ND (3.1)	ND (2.0) ND (3.1)	2.8 3.2	ND (0.20) ND (0.31)	ND (0.20) 0.38 J	0.50 J ND (0.31)	0.26 J 0.46 J	ND (0.20) ND (0.31)	ND (0.20) ND (0.31)	ND (0.20) ND (0.31)	ND (0.20) 0.56 J	ND (0.20) ND (0.31)	ND (0.20) ND (0.31)	ND (0.20) ND (0.31)
trans-1,2-Dichloroethene ug/	/1 100		-	ND (0.31)	ND (0.31)	ND (1.8)	ND (0.31)	ND (0.2)	ND (0.36)	ND (3.6)	ND (3.6)	ND (0.36)	ND (0.31)	ND (0.36)	ND (0.31)	ND (0.36)	ND (0.31)	ND (0.31)	ND (0.31)	ND (0.36)	ND (0.31)	ND (0.31)	ND (0.31)
1,2-Dichloropropane ug/	_			ND (0.33)	ND (0.33)	ND (1.6)	ND (0.33)	ND (6.5)	ND (0.33)	ND (3.3)	ND (3.3)	1.4	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)	ND (0.33)
cis-1,3-Dichloropropene ug/			-	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.93) ND (1.3)	ND (0.19) ND (0.26)	ND (3.7) ND (5.2)	ND (0.19) ND (0.26)	ND (1.9) ND (2.6)	ND (1.9) ND (2.6)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)	ND (0.19) ND (0.26)
trans-1,3-Dichloropropene ug/ Ethylbenzene ug/				ND (0.20)	97.6	2.8 J	303	ND (3.9)	ND (0.20)	262	39.2	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Freon 113 ug/	/I -		20000	ND (1.2)	ND (1.2)	ND (5.8)	ND (1.2)	ND (23)	ND (1.2)	ND (12)	ND (12)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)	ND (1.2)
2-Hexanone ug/ Isopropylbenzene ug/	•		300	ND (1.5) ND (0.16)	ND (1.5) 5.2	ND (7.6) ND (0.79)	ND (1.5) 34.4	ND (30) ND (3.1)	ND (1.5) ND (0.16)	ND (15) 44.1	ND (15) ND (1.6)	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)	ND (1.5) 0.32 J	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)	ND (1.5) ND (0.16)
Isopropylbenzene ug/ Methyl Acetate ug/			-	ND (0.16)	ND (1.5)	ND (0.79)	ND (1.5)	ND (3.1)	ND (1.5)	ND (15)	ND (1.0)	ND (0.16)	ND (0.16)	ND (1.5)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)	ND (0.16)
Methylcyclohexane ug/	4 -		-	ND (0.78)	82.3	ND (3.9)	72	ND (16)	ND (0.78)	23.7 J	ND (7.8)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	1.5 J
Methyl Tert Butyl Ether ug/	_		-	ND (0.34)	487	765	9.3	6010 ND (04)	4.9	1200	1270	11.1 ND (1.2)	4.2 ND (4.2)	4.4 ND (4.2)	17.5	880 ND (4.0)	ND (0.34)	110 ND (4.2)	ND (0.34)	30.8	8.9	6.5	ND (0.34)
4-Methyl-2-pentanone(MIBK) ug/ Methylene chloride ug/	/ 3			ND (1.2) ND (1.0)	7.8 ND (1.0)	ND (6.0) ND (5.0)	2.1 J ND (1.0)	ND (24) ND (20)	ND (1.2) ND (1.0)	ND (12) ND (10)	ND (12) ND (10)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)	ND (1.2) ND (1.0)
Styrene ug/	/1 100		-	ND (0.27)	ND (0.27)	ND (1.4)	ND (0.27)	ND (5.4)	ND (0.27)	ND (2.7)	ND (2.7)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)
Tert Butyl Alcohol ug/ 1.1.2.2-Tetrachloroethane ug/			-	ND (3.0) ND (0.39)	263 ND (0.20)	2820	ND (3.0) ND (0.39)	64700 ND (7.9)	16.7	3850	575	25.8	34.9 ND (0.39)	39 ND (0.39)	19.1 ND (0.39)	720 ND (0.39)	ND (3.0)	141 ND (0.39)	ND (3.0)	324 ND (0.39)	50.1	22.9 ND (0.39)	4.5 J ND (0.39)
1,1,2,2-Tetrachloroethane ug/ Tetrachloroethene ug/				ND (0.39) ND (0.23)	ND (0.39) ND (0.23)	ND (2.0) ND (1.2)	ND (0.39)	ND (7.9) ND (4.7)	ND (0.39) ND (0.23)	ND (3.9) ND (2.3)	ND (3.9) ND (2.3)	ND (0.39) 3.8	ND (0.39)	ND (0.39)	ND (0.39) ND (0.23)	ND (0.39)	ND (0.39) ND (0.23)	ND (0.39) ND (0.23)	ND (0.39) ND (0.23)	ND (0.39)	ND (0.39) ND (0.23)	ND (0.39) ND (0.23)	ND (0.39) ND (0.23)
Toluene ug/	_		-	ND (0.23)	71.5	34.8	71.4	ND (4.5)	ND (0.23)	106	8.7 J	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)
1,2,3-Trichlorobenzene ug/	_		-	ND (0.20)	ND (0.20)	ND (1.0)	ND (0.20)	ND (4.0)	ND (0.20)	ND (2.0)	ND (2.0)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
1,2,4-Trichlorobenzene ug/ 1,1,1-Trichloroethane ug/			-	ND (0.25) 0.65 J	ND (0.25) ND (0.22)	ND (1.2) ND (1.1)	ND (0.25) ND (0.22)	ND (4.9) ND (4.3)	ND (0.25) ND (0.22)	ND (2.5) ND (2.2)	ND (2.5) ND (2.2)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)	ND (0.25) ND (0.22)
1,1,2-Trichloroethane ug/			-	ND (0.28)	ND (0.28)	ND (1.4)	ND (0.28)	ND (5.5)	ND (0.28)	ND (2.8)	ND (2.8)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)
Trichloroethene ug/			-	ND (0.26)	ND (0.26)	ND (1.3)	ND (0.26)	ND (5.1)	2.9	ND (2.6)	ND (2.6)	1.8	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)
Trichlorofluoromethane ug/ Vinvl chloride ug/	/ 2000	)		ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (2.9) ND (1.6)	ND (0.58) ND (0.33)	ND (12) ND (6.5)	ND (0.58) ND (0.33)	ND (5.8) ND (3.3)	ND (5.8) ND (3.3)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)	ND (0.58) ND (0.33)
m,p-Xylene ug/	/1 -		-	ND (0.42)	243	68.1	377	ND (8.5)	ND (0.42)	184	49.1	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.42)
o-Xylene ug/			-	ND (0.21)	80.4	46	60.9	ND (4.1)	ND (0.21)	37.8	5.7 J	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
Xylene (total) ug/ GC/MS Volatile TIC	/1 1000	)	-	ND (0.21)	324	114	438	ND (4.1)	ND (0.21)	222	54.8	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
Total TIC, Volatile ug/	1 -		-	0	3310 J	40 J	3820 J	0	0	2152 J	0	0	110 J	0	0	0	0	0	0	29 J	0	0	6.5 J
Total Alkanes ug/			-	0	2220 J	73 J	1230 J	0	0	1639 J	65 J	0	0	0	0	0	0	0	0	0	0	0	0
GC/MS Semi-volatiles (SW846 8270 2-Chlorophenol ug/			-	ND (0.82)	ND (0.82)	ND (0.83)	ND (0.83)	ND (0.83)	ND (0.83)	ND (0.83)	ND (0.87)	ND (0.83)	ND (0.83)	ND (0.83)	ND (0.82)	ND (0.89)	ND (0.83)	ND (0.84)	ND (0.84)	ND (0.83)	ND (0.82)	ND (0.83)	ND (0.83)
4-Chloro-3-methyl phenol ug/			100	ND (0.89)	ND (0.89)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.95)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.89)	ND (0.97)	ND (0.90)	ND (0.91)	ND (0.91)	ND (0.90)	ND (0.89)	ND (0.90)	ND (0.90)
2,4-Dichlorophenol ug/	. 20		-	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.4)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.4)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)	ND (1.3)
2,4-Dimethylphenol ug/ 2,4-Dinitrophenol ug/			-	ND (2.4) ND (1.6)	2.8 J ND (1.6)	ND (2.5) ND (1.6)	4.6 J ND (1.6)	ND (2.5) ND (1.6)	ND (2.5) ND (1.6)	ND (2.5) ND (1.6)	ND (2.6) ND (1.6)	ND (2.5) ND (1.6)	ND (2.5) ND (1.6)	ND (2.5) ND (1.6)	ND (2.4) ND (1.6)	ND (2.7) ND (1.7)	ND (2.5) ND (1.6)	ND (2.5) ND (1.6)	ND (2.5) ND (1.6)	ND (2.5) ND (1.6)	ND (2.4) ND (1.6)	ND (2.5) ND (1.6)	ND (2.5) ND (1.6)
2-Methylphenol ug/	/1 -		50	ND (0.89)	ND (0.89)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.94)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.89)	ND (0.97)	ND (0.90)	ND (0.91)	ND (0.91)	ND (0.90)	ND (0.89)	ND (0.90)	ND (0.90)
3&4-Methylphenol ug/			50	ND (0.88)	ND (0.88)	ND (0.89)	ND (0.89)	ND (0.89)	ND (0.89)	ND (0.89)	ND (0.94)	ND (0.89)	ND (0.89)	ND (0.89)	ND (0.88)	ND (0.96)	ND (0.89)	ND (0.90)	ND (0.90)	ND (0.89)	ND (0.88)	ND (0.89)	2.5
2-Nitrophenol ug/ 4-Nitrophenol ug/			-	ND (0.96) ND (1.2)	ND (0.96) ND (1.2)	ND (0.97) ND (1.2)	ND (0.97) ND (1.2)	ND (0.97) ND (1.2)	ND (0.97) ND (1.2)	ND (0.97) ND (1.2)	ND (1.0) ND (1.2)	ND (0.97) ND (1.2)	ND (0.97) ND (1.2)	ND (0.97) ND (1.2)	ND (0.96) ND (1.2)	ND (1.0) ND (1.3)	ND (0.97) ND (1.2)	ND (0.98) ND (1.2)	ND (0.98) ND (1.2)	ND (0.97) ND (1.2)	ND (0.96) ND (1.2)	ND (0.97) ND (1.2)	ND (0.97) ND (1.2)
Phenol ug/		)	-	ND (0.39)	8.1	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	11.4	3.1	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.39)	ND (0.43)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.39)	ND (0.40)	ND (0.40)
2,3,4,6-Tetrachlorophenol ug/	/1 200		-	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.6)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.6)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)	ND (1.5)
2,4,5-Trichlorophenol ug/ 2,4,6-Trichlorophenol ug/				ND (1.3) ND (0.92)	ND (1.3) ND (0.92)	ND (1.3) ND (0.93)	ND (1.3) ND (0.93)	ND (1.3) ND (0.93)	ND (1.3) ND (0.93)	ND (1.3) ND (0.93)	ND (1.4) ND (0.98)	ND (1.3) ND (0.93)	ND (1.3) ND (0.93)	ND (1.3) ND (0.93)	ND (1.3) ND (0.92)	ND (1.4) ND (1.0)	ND (1.3) ND (0.93)	ND (1.4) ND (0.94)	ND (1.4) ND (0.94)	ND (1.3) ND (0.93)	ND (1.3) ND (0.92)	ND (1.3) ND (0.93)	ND (1.3) 1.2 J
Acenaphthene ug/			-	ND (0.92) ND (0.19)	6.5	ND (0.93)	ND (0.93)	ND (0.93)	ND (0.93)	0.53 J	ND (0.98)	ND (0.19)	2.3	ND (0.93)	ND (0.92)	ND (0.21)	ND (0.93)	ND (0.94)	ND (0.19)	ND (0.19)	ND (0.92)	ND (0.93)	ND (0.19)
Acenaphthylene ug/	/I -		100	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.15)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)	ND (0.14)
Acetophenone ug/			-	ND (0.21) ND (0.21)	ND (0.21) 1.8	ND (0.21) ND (0.21)	ND (0.21) ND (0.21)	ND (0.21) ND (0.21)	ND (0.21)	ND (0.21)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.21) ND (0.21)	ND (0.21)	ND (0.23)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21) ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
Anthracene ug/ Atrazine ug/		,		ND (0.21) ND (0.45)	1.8 ND (0.45)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.22) ND (0.48)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.23) ND (0.49)	ND (0.21) ND (0.45)	ND (0.22) ND (0.46)	ND (0.22) ND (0.46)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)	ND (0.21) ND (0.45)
Benzaldehyde ug/	/1 -		-	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.31)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.31)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)	ND (0.29)
Benzo(g,h,i)perylene ug/			100	ND (0.34) ND (0.40)	ND (0.34) ND (0.40)	ND (0.34) ND (0.41)	ND (0.34) ND (0.41)	ND (0.34) ND (0.41)	ND (0.34) ND (0.41)	ND (0.34) ND (0.41)	ND (0.36) ND (0.43)	ND (0.34) ND (0.41)	ND (0.34) ND (0.41)	ND (0.34) ND (0.41)	ND (0.34) ND (0.40)	ND (0.37) ND (0.44)	ND (0.34) ND (0.41)	ND (0.35) ND (0.41)	ND (0.35) ND (0.41)	ND (0.34) ND (0.41)	ND (0.34) ND (0.40)	ND (0.34) ND (0.41)	ND (0.34) ND (0.41)
4-Bromophenyl phenyl ether ug/ Butyl benzyl phthalate ug/	_		-	ND (0.40) ND (0.46)	ND (0.40) ND (0.46)	ND (0.41) ND (0.46)	ND (0.41) ND (0.46)	ND (0.41) ND (0.46)	ND (0.41) ND (0.46)	ND (0.41) ND (0.46)	ND (0.43) ND (0.49)	ND (0.41) ND (0.46)	ND (0.41) ND (0.46)	ND (0.41) ND (0.46)	ND (0.40) ND (0.46)	ND (0.44) ND (0.50)	ND (0.41) ND (0.46)	ND (0.41) ND (0.47)	ND (0.41) ND (0.47)	ND (0.41) ND (0.46)	ND (0.40) ND (0.46)	ND (0.41) ND (0.46)	ND (0.41) ND (0.46)
1,1'-Biphenyl ug/	/I 400		-	ND (0.21)	2.7	ND (0.21)	0.93 J	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.23)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.23)	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
2-Chloronaphthalene ug/			-	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.25)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.26)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)
4-Chloroaniline ug/	/1 30		-	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.36)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.37)	ND (0.34)	ND (0.35)	ND (0.35)	ND (0.34)	ND (0.34)	ND (0.34)	ND (0.34)

# Table 3 AOC 10 - Truck Loading Rack Hess Corporation - Port Reading Complex (HC-PR) 750 Cliff Road Port Reading, NJ 2016 Groundwater Sampling Analytical Results

Client Sample ID:			TR-1R	TR-2R	TR-3RR	TR-4R	TR-4D	TR-4DD	TR-5	TR-6	TR-6D	AB-4R	AB-4D	PER-2	PER-2D	PER-3	PER-3D	PER-9	PER-9D	PER-9DD	PER-10	PER-10D
Lab Sample ID:	NJ Groundwater	NJ Interim Groundwater	JC31908-3	JC31908-4	JC31908-10	JC32172-6	JC32172-7	JC32172-8	JC31908-11	JC31908-12	JC31908-13	JC31999-14	JC31999-13	JC31908-5	JC31908-6	JC31908-14	JC31908-15	JC31908-7	JC31908-8	JC31908-9	JC31999-9	JC31999-10
Date Sampled:	Criteria (NJAC7:9C 7/07)	Criteria (NJAC7:9C	11/16/2016	11/16/2016	11/16/2016	11/21/2016	11/21/2016	11/21/2016	11/16/2016	11/16/2016	11/16/2016	11/17/2016	11/17/2016	11/16/2016	11/16/2016	11/16/2016	11/16/2016	11/16/2016	11/16/2016	11/16/2016	11/17/2016	11/17/2016
Matrix:	(110710710071017	11/15)	Groundwater																			
Carbazole ug/l	-	-	ND (0.23)	0.72 J	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	0.51 J	ND (0.24)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.25)	ND (0.23)						
Caprolactam ug/l Chrysene ug/l	-	5000	ND (0.65) ND (0.18)	ND (0.65) 0.47 J	ND (0.66) ND (0.18)	ND (0.69) ND (0.19)	ND (0.66) ND (0.18)	ND (0.66) ND (0.18)	ND (0.66) ND (0.18)	ND (0.65) ND (0.18)	ND (0.71) ND (0.19)	ND (0.66) ND (0.18)	ND (0.66) ND (0.18)	ND (0.66) ND (0.18)	ND (0.66) ND (0.18)	ND (0.65) ND (0.18)	ND (0.66) ND (0.18)	ND (0.66) ND (0.18)				
bis(2-Chloroethoxy)methane ug/l	-	-	ND (0.18)	ND (0.28)	ND (0.18)	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.18)										
bis(2-Chloroethyl)ether ug/l	7	-	ND (0.25)	ND (0.26)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.27)	ND (0.25)												
bis(2-Chloroisopropyl)ether ug/l	300	-	ND (0.40)	ND (0.40)	ND (0.41)	ND (0.43)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.40)	ND (0.44)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.40)	ND (0.41)	ND (0.41)				
4-Chlorophenyl phenyl ether ug/l 2,4-Dinitrotoluene ug/l	-	-	ND (0.37) ND (0.55)	ND (0.37) ND (0.55)	ND (0.37) ND (0.56)	ND (0.39) ND (0.59)	ND (0.37) ND (0.56)	ND (0.37) ND (0.56)	ND (0.37) ND (0.56)	ND (0.37) ND (0.55)	ND (0.40) ND (0.60)	ND (0.37) ND (0.56)	ND (0.37) ND (0.56)	ND (0.37) ND (0.56)	ND (0.37) ND (0.56)	ND (0.37) ND (0.55)	ND (0.37) ND (0.56)	ND (0.37) ND (0.56)				
2,6-Dinitrotoluene ug/l	-	-	ND (0.48)	ND (0.51)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.52)	ND (0.48)	ND (0.49)	ND (0.49)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)						
3,3'-Dichlorobenzidine ug/l	30	-	ND (0.51)	ND (0.54)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.55)	ND (0.51)	ND (0.52)	ND (0.52)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)						
Dibenzofuran ug/l Di-n-butyl phthalate ug/l	700	-	ND (0.22) ND (0.50)	2.5 J ND (0.50)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)	0.43 J ND (0.50)	ND (0.23) ND (0.53)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)	ND (0.24) ND (0.54)	ND (0.22) ND (0.50)	ND (0.22) ND (0.51)	ND (0.22) ND (0.51)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)	ND (0.22) ND (0.50)
Di-n-octyl phthalate ug/l	100	-	ND (0.23)	ND (0.23)	ND (0.24)	ND (0.25)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.23)	ND (0.25)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.23)	ND (0.24)	ND (0.24)				
Diethyl phthalate ug/l	6000	-	ND (0.26)	ND (0.28)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.28)	ND (0.26)	ND (0.27)	ND (0.27)	ND (0.26)	ND (0.26)	ND (0.26)	ND (0.26)						
Dimethyl phthalate ug/l	-	100	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.22)												
bis(2-Ethylhexyl)phthalate ug/l Fluoranthene ug/l	3 300	-	ND (1.7) ND (0.17)	ND (1.7) 2.6	ND (1.7) ND (0.17)	ND (0.17)	4.6 ND (0.17)	<b>30.3</b> ND (0.17)	ND (1.7) ND (0.17)	ND (1.8) ND (0.18)	ND (1.7) ND (0.17)	ND (1.7) ND (0.17)	ND (1.7) ND (0.17)	ND (1.7) ND (0.17)	2.0 J ND (0.18)	ND (1.7) ND (0.17)						
Fluorene ug/l	300	-	ND (0.17)	6.6	ND (0.17)	0.44 J	ND (0.17)	ND (0.17)	0.46 J	ND (0.18)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.19)	ND (0.17)						
Hexachlorocyclopentadiene ug/l	40	-	ND (2.8)	ND (3.0)	ND (2.8)	ND (2.8)	ND (2.8)	ND (2.8)	ND (3.0)	ND (2.8)												
Hexachloroethane ug/l Isophorone ug/l	40		ND (0.39) ND (0.28)	ND (0.41) ND (0.29)	ND (0.39) ND (0.28)	ND (0.39) ND (0.28)	ND (0.39) ND (0.28)	ND (0.39) ND (0.28)	ND (0.42) ND (0.30)	ND (0.39) ND (0.28)	ND (0.40) ND (0.28)	ND (0.40) ND (0.28)	ND (0.39) ND (0.28)	ND (0.39) ND (0.28)	ND (0.39) ND (0.28)	ND (0.39) ND (0.28)						
2-Methylnaphthalene ug/l	-	30	ND (0.21)	20	ND (0.21)	111	ND (0.21)	ND (0.21)	3	ND (0.22)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.23)	ND (0.21)						
2-Nitroaniline ug/l	-	-	ND (0.28)	ND (0.29)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.28)	ND (0.30)	ND (0.28)												
3-Nitroaniline ug/l 4-Nitroaniline ug/l		-	ND (0.39) ND (0.44)	ND (0.41) ND (0.47)	ND (0.39) ND (0.44)	ND (0.39) ND (0.44)	ND (0.39) ND (0.44)	ND (0.39) ND (0.44)	ND (0.42) ND (0.48)	ND (0.39) ND (0.44)	ND (0.39) ND (0.45)	ND (0.39) ND (0.45)	ND (0.39) ND (0.44)	ND (0.39) ND (0.44)	ND (0.39) ND (0.44)	ND (0.39) ND (0.44)						
Naphthalene ug/l	300	-	ND (0.44)	28.7	1.2	214	ND (0.44)	ND (0.44)	30.3	3.7	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.46)	ND (0.23)	ND (0.43)	ND (0.43)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.23)
Nitrobenzene ug/l	6	-	ND (0.64)	ND (0.64)	ND (0.65)	ND (0.68)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.64)	ND (0.70)	ND (0.65)	ND (0.66)	ND (0.66)	ND (0.65)	ND (0.64)	ND (0.65)	ND (0.65)				
N-Nitroso-di-n-propylamine ug/l N-Nitrosodiphenylamine ug/l	10	-	ND (0.48) ND (0.22)	ND (0.48) ND (0.22)	ND (0.49) ND (0.22)	ND (0.51) ND (0.24)	ND (0.49) ND (0.22)	ND (0.49) ND (0.22)	ND (0.49) ND (0.22)	ND (0.48) ND (0.22)	ND (0.52) ND (0.24)	ND (0.49) ND (0.22)	ND (0.49) ND (0.23)	ND (0.49) ND (0.23)	ND (0.49) ND (0.22)	ND (0.48) ND (0.22)	ND (0.49) ND (0.22)	ND (0.49) ND (0.22)				
Phenanthrene ug/l	-	-	ND (0.18)	5.6	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	0.83 J	ND (0.19)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.18)	ND (0.19)	ND (0.18)						
Pyrene ug/l	200	-	ND (0.22)	2.8	ND (0.22)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.22)										
1,2,4,5-Tetrachlorobenzene ug/l GC/MS Semi-volatiles (SW846 8270D	- PV CIM)	-	ND (0.37)	ND (0.39)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.40)	ND (0.37)	ND (0.38)	ND (0.38)	ND (0.37)	ND (0.37)	ND (0.37)	ND (0.37)						
4,6-Dinitro-o-cresol ug/l		1	ND (0.15)	ND (0.16)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.17)	ND (0.15)	ND (0.16)	ND (0.16)	ND (0.15)	ND (0.15)	ND (0.15)	ND (0.15)						
Pentachlorophenol ug/l	0.3	-	ND (0.13)	ND (0.14)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.14)	ND (0.13)												
Benzo(a)anthracene ug/l Benzo(a)pyrene ug/l	0.1	-	ND (0.023)	1.1 0.282	ND (0.023)	ND (0.023)	ND (0.023)	0.202 ND (0.034)	ND (0.023)	ND (0.024)	ND (0.023)	ND (0.023)	ND (0.023)	ND (0.023)	ND (0.025)	ND (0.023)						
Benzo(a)pyrene ug/l Benzo(b)fluoranthene ug/l	0.1	-	ND (0.033) ND (0.043)	0.282	ND (0.034) ND (0.044)	ND (0.034) ND (0.044)	ND (0.034) ND (0.044)	0.114	ND (0.034) ND (0.044)	ND (0.035) ND (0.046)	ND (0.034) ND (0.044)	ND (0.034) ND (0.044)	ND (0.034) ND (0.044)	ND (0.033) ND (0.043)	ND (0.036) ND (0.047)	ND (0.034) ND (0.044)	ND (0.034) ND (0.044)	ND (0.034) ND (0.044)	ND (0.034) ND (0.044)	ND (0.033) ND (0.043)	ND (0.034) ND (0.044)	ND (0.034) ND (0.044)
Benzo(k)fluoranthene ug/l	0.5	-	ND (0.033)	0.189	ND (0.033)	ND (0.033) <sup>a</sup>	ND (0.033) <sup>a</sup>	ND (0.033) <sup>a</sup>	ND (0.033)	ND (0.035)	ND (0.033)	ND (0.033)	ND (0.033)	ND (0.033)	ND (0.036)	ND (0.033)	ND (0.034)	ND (0.034)	ND (0.033)	ND (0.033)	ND (0.033)	ND (0.033)
Dibenzo(a,h)anthracene ug/l	0.3	-	ND (0.036)	ND (0.036)	ND (0.037)	ND (0.039)	ND (0.037)	ND (0.037)	ND (0.037)	ND (0.036)	ND (0.039)	ND (0.037)	ND (0.037)	ND (0.037)	ND (0.037)	ND (0.036)	ND (0.037)	ND (0.037)				
Hexachlorobenzene ug/l Hexachlorobutadiene ug/l	0.02	-	ND (0.011) ND (0.018)	ND (0.012) ND (0.019)	ND (0.011) ND (0.018)	ND (0.011) ND (0.018)	ND (0.011) ND (0.018)	ND (0.011) ND (0.018)	ND (0.012) ND (0.019)	ND (0.011) ND (0.018)												
Indeno(1,2,3-cd)pyrene ug/l	0.2	-	ND (0.038)	0.121	ND (0.038)	ND (0.040)	ND (0.038)	ND (0.038)	ND (0.038)	ND (0.038)	ND (0.041)	ND (0.038)	ND (0.039)	ND (0.039)	ND (0.038)	ND (0.038)	ND (0.038)	ND (0.038)				
1,4-Dioxane ug/l	-	0.4	0.387	ND (0.049)	ND (0.049)	ND (0.049)	1.49	0.657	ND (0.049)	ND (0.052)	0.941	ND (0.049)	3.91	ND (0.049)	0.746	ND (0.049)	0.523	ND (0.050)	0.519	ND (0.049)	3.79	ND (0.049)
GC/MS Semi-volatile TIC Total TIC, Semi-Volatile ug/l	-	-	0	1213 J	39.9 J	860.2 J	105.5 J	39.9 J	629.7 J	26.9 J	12 J	29.3 J	54.7 J	30.8 J	0	8.1 J	35 J	9 J	34 J	0	307.4 J	17.3 J
Total Alkanes ug/l	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Metals Analysis	200		400	274	4000	20.1	242	4000	0010	001	4=0	E44	7.0	272	4000	1000	4000	4000	4000	4000	*200	F50
Aluminum ug/l Antimony ug/l	200 6	-	<b>423</b> <6.0	371 12.2	1090 <6.0	<b>304</b> <6.0	<b>210</b> <6.0	<b>1030</b> <6.0	2640 7.4	664 8.8	<b>476</b> <6.0	511 13.1	<b>746</b> <6.0	<b>378</b> <6.0	<200 <6.0	<200 <6.0	<200 <6.0	<b>1920</b> <6.0	<200 <6.0	<200 <6.0	<200 <6.0	<b>559</b> <6.0
Arsenic ug/l	3	-	<3.0	7.1	3.8	14.1	<3.0	3.7	12.9	11.7	<3.0	12.6	11.1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3	5.9
Barium ug/l	6000	-	<200	<200	<200	<200	238	<200	371	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	645	<200
Beryllium ug/l Cadmium ug/l	4	-	<1.0 <3.0	<1.0 <3.0	<1.0 <3.0	<1.0 <3.0	<1.0 3	<1.0 <b>4.4</b>	<1.0 <3.0													
Calcium ug/l	-	-	56500	8930	38100	11400	104000	86000	88600	25400	88100	148000	140000	29300	111000	71900	62600	<5000	124000	83800	195000	77600
Chromium ug/l	70	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cobalt ug/l Copper ug/l	1300	100	<50 <10	<250 ° <10	<50 67.6	<50 <10	<50 <10	<50 <10	<50 33.3	<50 <10	<50 <10	<50 <10	<50 31.7									
Iron ug/l	300	-	689	414	1340	771	108	3930	6220	1440	354	1440	1160	800	<100	508	285	3320	<100	61300	<100	4030
Lead ug/l	5	-	<3.0	<3.0	4	<3.0	<3.0	5.2	7.6	<3.0	<3.0	<3.0	<15 <sup>d</sup>	5.5	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium ug/l Manganese ug/l	50	-	14400 <b>51.2</b>	<5000 <b>94.2</b>	<5000 <b>755</b>	<5000 22	17700 <b>582</b>	14400 148	33600 <b>2250</b>	<5000 <b>469</b>	22600 <15	120000 <b>85.8</b>	204000 <15	<5000 42.5	21000 <b>59.7</b>	134000 <b>162</b>	141000 <b>221</b>	<5000 <b>70.5</b>	47900 <b>89.9</b>	24300 1490	98000 <b>171</b>	23400 235
Mercury ug/l	2	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.30 b	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel ug/l	100	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50 <sup>d</sup>	23.9	<10	<10	<10	<10	<10	<10	19.4	<10
Potassium ug/l Selenium ug/l	- 40	-	<10000 <10	17100 <10	<10000 <10	12500 <10	<10000 <10	<10000 <10	<10000 <10	<10000 <10	<10000 <10	204000 <50 °	165000 <10	<10000 <10	<10000 <10	39600 <10	68600 <10	<10000 <10	15000 <10	<10000 <10	97900 <10	<10000 <10
Silver ug/l	40	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sodium ug/l	50000	-	42400	82700	18700	202000	120000	54900	354000	11600	59100	1270000	3230000	35200	57200	1040000	1090000	41300	269000	391000	1170000	162000
Thallium ug/l Vanadium ug/l	-	-	<2.0 <50	<2.0 57.5	<2.0 <50	<10 ° <50	<10 <sup>d</sup> <50	<2.0 <50														
Zinc ug/l	2000	-	<20	27.5	20.8	<20	<20	79.6	20.8	<20	<20	32.1	<20	238	<20	<20	<20	<20	<20	<20	<20	<20
General Chemistry																						
Nitrogen, Ammonia mg/l	3	-	<0.20	1.2	<0.20	1.2	0.34	<0.20	1.3	<0.20	<0.20	9.5	12.4	0.39	<0.20	0.57	15.6	<0.20	3.5	0.41	31	2.5

<sup>&</sup>lt;sup>a</sup> This compound in BS is outside in house QC limits bias high.

Exceeds GWQS

Exceeds Interim GWQS

<sup>&</sup>lt;sup>b</sup> Elevated sample detection limit due to difficult sample matrix.

Elevated detection limit due to dilution required for high interfering element.

<sup>d</sup> Elevated detection limit due to dilution required for high interfering element.

<sup>d</sup> Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).